

What is claimed is:

1. A dot display type video display apparatus displaying an image having a first frame frequency at a second frame frequency that is lower than said first frame frequency,  
5 said video display apparatus comprising:

a synchronization signal generation circuit for generating a synchronization signal of said second frame frequency;

a conversion frequency detector for calculating a  
10 number of frames making up an unit block at each of said frame frequencies and a number of frames to be thinned based on said first frame frequency and said second frame frequency;

a frame memory for storing a first frame having said first frame frequency;

15 a difference detector for comparing intensity data of each dot on said video display apparatus of a second frame which is currently input to said video display apparatus with intensity data of each dot of said first frame which is stored in said frame memory and which is immediately before said  
20 second frame, and detecting a difference between said two frames;

a difference adder for counting a number of dots for a case in which said difference of said intensity data detected by said difference detector is greater than a  
25 prescribed value;

a movement detection/judgment section for distinguishing whether or not a count value detected by said difference adder is below a prescribed value and outputting a signal indicating that thinning of said second frame is

possible, when said count value of said difference adder is below said prescribed value; and

a frame thinning section for thinning said second frame, in a case in which said signal indicating that frame thinning of said second frame is possible is output from said movement  
5 detection/judgment section and also a signal indicating that said number of frames to be thinned is output from said conversion frequency detector.

2. A video display apparatus according to claim 1, said  
10 frame thinning section further comprising:

a frame thinning means for executing frame thinning of said second frame; and

a frame thinning stopping means for stopping the frame thinning operation of said frame thinning means within a  
15 current block including said first frame and said second frame, in a case in which, if, as a result of an execution of frame thinning by said frame thinning means, a total number of thinned frames has reached said number of frames to be thinned which is output from said conversion frequency detector.

20 3. A video display apparatus according to claim 1, wherein an area detector for detecting movement of an image within a prescribed area on said video display apparatus is provided, and detection results of said area detector being output to said movement detection/judgment section.

25 4. A video display apparatus according to claim 1, wherein said video display apparatus is a plasma display apparatus.

5. A video display apparatus according to claim 1, wherein said video display apparatus is a liquid-crystal

display apparatus.

6. A dot display type video display apparatus displaying an image having a first frame frequency at a second frame frequency that is lower than said first frame frequency,  
5 said video display apparatus comprising:

a synchronization signal generation circuit for generating a synchronization signal of said second frame frequency;

a conversion frequency detector for calculating a  
10 number of frames making up an unit block at each of said frame frequencies and a number of frames to be thinned based on said first frame frequency and said second frame frequency;

a frame memory for storing a first frame having said first frame frequency;

15 a difference detector for comparing intensity data of each dot on said video display apparatus of a second frame which is currently input to said video display apparatus with intensity data of each dot of said first frame which is stored in said frame memory and which is immediately before said  
20 second frame, and detecting a difference between said two frames;

a difference adder for counting a number of dots for a case in which said difference of said intensity data detected by said difference detector is greater than a  
25 prescribed value;

a movement detection/judgment section for distinguishing whether or not a count value detected by said difference adder is below a prescribed value and outputting a signal indicating that thinning of said second frame is

possible, when said count value of said difference adder is below said prescribed value;

a frame thinning section for thinning said second frame, in a case in which said signal indicating that frame thinning of said second frame is possible is output from said movement  
5 detection/judgment section and also a signal indicating that said number of frames to be thinned is output from said conversion frequency detector; and

a frame thinning stopping section for stopping the  
10 frame thinning operation of said frame thinning section within a current block including said first frame and said second frame, in a case in which, if, as a result of an execution of frame thinning by said frame thinning section, a total number of thinned frames has reached said number of  
15 frames to be thinned which is output from said conversion frequency detector.

7. A plasma display apparatus displaying an image having a first frame frequency at a second frame frequency that is lower than said first frame frequency, said video  
20 display apparatus comprising:

a synchronization signal generation circuit for generating a synchronization signal of said second frame frequency;

a conversion frequency detector for calculating a  
25 number of frames making up an unit block at each of said frame frequencies and a number of frames to be thinned based on said first frame frequency and said second frame frequency;

a frame memory for storing a first frame having said first frame frequency;

a difference detector for comparing intensity data of each dot on said video display apparatus of a second frame which is currently input to said video display apparatus with intensity data of each dot of said first frame which is stored  
5 in said frame memory and which is immediately before said second frame, and detecting a difference between said two frames;

a difference adder for counting a number of dots for a case in which said difference of said intensity data  
10 detected by said difference detector is greater than a prescribed value;

a movement detection/judgment section for distinguishing whether or not a count value detected by said difference adder is below a prescribed value and outputting  
15 a signal indicating that thinning of said second frame is possible, when said count value of said difference adder is below said prescribed value;

a frame thinning section for thinning said second frame, in a case in which said signal indicating that frame thinning  
20 of said second frame is possible is output from said movement detection/judgment section and also a signal indicating that said number of frames to be thinned is output from said conversion frequency detector; and

a frame thinning stopping section for stopping the  
25 frame thinning operation of said frame thinning section within a current block including said first frame and said second frame, in a case in which, if, as a result of an execution of frame thinning by said frame thinning section, a total number of thinned frames has reached said number of

frames to be thinned which is output from said conversion frequency detector.

8. A display method for a dot display type video display apparatus displaying an image having a first frame frequency  
 5 at a second frame frequency that is lower than said first frame frequency, said video display apparatus comprising:

a synchronization signal generation circuit for generating a synchronization signal of said second frame frequency;

10 a conversion frequency detector for calculating a number of frames making up an unit block at each of said frame frequencies and a number of frames to be thinned based on said first frame frequency and said second frame frequency;

a frame memory for storing a first frame having said  
 15 first frame frequency;

a difference detector for comparing intensity data of each dot on said video display apparatus of a second frame which is currently input to said video display apparatus with intensity data of each dot of said first frame which is stored  
 20 in said frame memory and which is immediately before said second frame, and detecting a difference between said two frames;

a difference adder for counting a number of dots for a case in which said difference of said intensity data  
 25 detected by said difference detector is greater than a prescribed value;

a movement detection/judgment section for distinguishing whether or not a count value detected by said difference adder is below a prescribed value and outputting

a signal indicating that thinning of said second frame is possible, when said count value of said difference adder is below said prescribed value; and

a frame thinning section for thinning said second frame,  
5 in a case in which said signal indicating that frame thinning of said second frame is possible is output from said movement detection/judgment section and also a signal indicating that said number of frames to be thinned is output from said conversion frequency detector,

10 said method comprising the steps of:

comparing said intensity data of said first frame with that of said second frame;

thinning said second frame when said intensity data of said two frames are the same;

15 stopping said frame thinning operation within a current block including said first frame and said second frame, in a case in which, as a result of an execution of frame thinning, a total number of thinned frames has reached said number of frames to be thinned, which is output from said conversion  
20 frequency detector